

## AIR QUALITY PERMIT

Issued To: Devon Energy Production Company, L.P.  
Blaine County #3 Compressor Station  
P.O. Box 2606  
Havre, Montana 59501

Permit: #2719-07  
Application Complete: 9/26/07  
Preliminary Determination Issued: 10/29/07  
Department's Decision Issued: 11/21/07  
Permit Final:  
AFS #: 005-0003

An air quality permit, with conditions, is hereby granted to Devon Energy Production Company, L.P. (Devon), pursuant to Sections 75-2-204 and 211 of the Montana Code Annotated (MCA), as amended, and Administrative Rules of Montana (ARM) 17.8.740, *et seq.*, as amended, for the following:

### SECTION I: Permitted Facilities

#### A. Plant Location

Permit #2719-07 is issued for the operation of the Blaine County #3 Compressor Station located in the NE $\frac{1}{4}$  of the SE $\frac{1}{4}$  of Section 7, Township 27 North, Range 19 East, Blaine County, Montana. A listing of the permitted equipment is contained in Section I.A of the permit analysis.

#### B. Current Permit Action

On September 26, 2007, the Department of Environmental Quality (Department) received a complete Montana Air Quality Permit (MAQP) application from Devon requesting that the Department modify MAQP #2719-06. Devon is proposing to install a rich-burn natural gas compressor engine with a maximum rated design capacity equal to or less than 1,547-horsepower (hp) with a non-selective catalytic reduction (NSCR) unit and an electronic air-to-fuel ratio (AFR) controller.

### SECTION II: Conditions and Limitations

#### A. Emission Limitations

1. Source #01, the 750-hp Waukesha L7042GU natural gas compressor engine, shall be operated with a NSCR unit and an AFR controller. The engine shall have a minimum stack height of 20 feet above ground level and the engine speed shall not exceed 950 revolutions per minute (rpm) of continuous duty operation. The engine emissions shall not exceed the following limits (ARM 17.8.752):

Oxides of Nitrogen (NO <sub>x</sub> <sup>1</sup> )	3.31 lb/hr
Carbon Monoxide (CO)	4.96 lb/hr
Volatile Organic Compounds (VOC)	1.65 lb/hr

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<sup>1</sup> NO<sub>x</sub> reported as NO<sub>2</sub>.

2. Source #02, the 400-hp Waukesha F18GL lean-burn natural gas compressor engine shall be operated with an AFR controller. The engine shall have a minimum stack height of 14 feet above ground level, and the engine speed shall not exceed 1,800 rpm of continuous duty operation. Emissions from this engine shall not exceed the following limits (ARM 17.8.752):

NO <sub>x</sub> <sup>1</sup>	1.76 lb/hr
CO	2.75 lb/hr
VOC	0.88 lb/hr

3. Emissions from source #04, the 1,150-hp Waukesha 5790GL lean-burn natural gas compressor engine, shall not exceed the following limits (ARM 17.8.752):

NO <sub>x</sub> <sup>1</sup>	3.80 lb/hr
CO	6.72 lb/hr
VOC	2.54 lb/hr

4. Source #08, the 1,547-hp rich-burn natural gas compressor engine, shall be operated with a NSCR unit and an AFR controller. The engine shall have a minimum stack height of 10 feet above ground level. The engine emissions shall not exceed the following limits (ARM 17.8.752):

NO <sub>x</sub> <sup>1</sup>	3.41 lb/hr
CO	3.41 lb/hr
VOC	3.41 lb/hr

5. Devon shall operate all equipment to provide the maximum air pollution control for which it was designed (ARM 17.8.749).
6. Devon shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any sources installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304).
7. Devon shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308).
8. Devon shall treat all unpaved portions of the haul roads, access roads, parking lots, or general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the reasonable precautions limitation in Section II.A.7 (ARM 17.8.749).

#### B. Testing Requirements

1. Devon shall test Source #01, the 750-hp Waukesha L7042GU natural gas compressor engine for NO<sub>x</sub> and CO, concurrently, and demonstrate compliance with the NO<sub>x</sub> and CO emission limits contained in Section II.A.1 on an every 4-year basis or according to another testing/monitoring schedule as may be approved by the Department (ARM 17.8.105 and ARM 17.8.749).

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<sup>1</sup> NO<sub>x</sub> reported as NO<sub>2</sub>.

2. Devon shall test the Source #02, the 400-hp Waukesha F18GL natural gas compressor engine for NO<sub>x</sub> and CO, concurrently, and demonstrate compliance with the NO<sub>x</sub> and CO emission limits contained in Section II.A.2 on an every 4-year basis or according to another testing/monitoring schedule as may be approved by the Department (ARM 17.8.105 and ARM 17.8.749).
3. Devon shall test Source #04, the 1,150-hp Waukesha 5790GL lean-burn natural gas compressor engine for NO<sub>x</sub> and CO, concurrently, and demonstrate compliance with the NO<sub>x</sub> and CO emission limits contained in Section II.A.3. Further testing for Source #04 shall occur on an every 4-year basis from the date the engine was last tested, or according to another testing/monitoring schedule as may be approved by the Department (ARM 17.8.105 and ARM 17.8.749).
4. Devon shall test Source #08, the 1,547-hp rich burn natural gas compressor engine for NO<sub>x</sub> and CO, concurrently, and demonstrate compliance with the NO<sub>x</sub> and CO emission limits contained in Section II.A.4 on an every 4-year basis or according to another testing/monitoring schedule as may be approved by the Department (ARM 17.8.105 and ARM 17.8.749).
5. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
6. The Department may require further testing (ARM 17.8.105).

C. Operational Reporting Requirements

1. Devon shall supply the Department with annual production information for all emission points, as required by the Department in the annual emission inventory request. The request will include, but is not limited to, all sources of emissions identified in the emission inventory contained in the permit analysis.

Production information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request. Information shall be in the units required by the Department. This information may be used to calculate operating fees, based on actual emissions from the facility, and/or to verify compliance with permit limitations (ARM 17.8.505).

2. Devon shall notify the Department of any construction or improvement project conducted pursuant to ARM 17.8.745, that would include a change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location or fuel specifications, or would result in an increase in source capacity above its permitted operation or the addition of a new emission unit. The notice must be submitted to the Department, in writing, 10 days prior to start up or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(1)(d) (ARM 17.8.745).
3. All records compiled in accordance with this permit must be maintained by Devon as a permanent business record for at least 5 years following the date of the measurement, must be available at the plant site for inspection by the Department, and must be submitted to the Department upon request (ARM 17.8.749).

### SECTION III: General Conditions

- A. Inspection – Devon shall allow the Department’s representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment (CEMS, CERMS) or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.
- B. Waiver – The permit and the terms, conditions, and matters stated herein shall be deemed accepted if Devon fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving Devon of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.* (ARM 17.8.756).
- D. Enforcement – Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties or other enforcement action as specified in Section 75-2-401, *et seq.*, MCA.
- E. Appeals – Any person or persons jointly or severally adversely affected by the Department’s decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefore, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing does not stay the Department’s decision, unless the Board issues a stay upon receipt of a petition and a finding that a stay is appropriate under Section 75-2-211(11)(b), MCA. The issuance of a stay on a permit by the Board postpones the effective date of the Department’s decision until conclusion of the hearing and issuance of a final decision by the Board. If a stay is not issued by the Board, the Department’s decision on the application is final 16 days after the Department’s decision is made.
- F. Permit Inspection – As required by ARM 17.8.755, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by the Department at the location of the source.
- G. Permit Fee – Pursuant to Section 75-2-220, MCA, as amended by the 1991 Legislature, failure to pay the annual operation fee by Devon may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.
- H. Construction Commencement – Construction must begin within 3 years of permit issuance and proceed with due diligence until the project is complete or the permit shall be revoked (ARM 17.8.762).

Permit Analysis  
Devon Energy Production Company, L.P.  
Permit #2719-07

I. Introduction/Process Description

Devon Energy Production Company, L.P. (Devon) owns and operates a natural gas compressor station located in the NE¼ of the SE¼ of Section 7, Township 27 North, Range 19 East, Blaine County, Montana. The facility is known as the Blaine County #3 Compressor Station.

A. Permitted Equipment

The facility consists of the following equipment and materials:

1. Source #1: (1) 750-horsepower (hp) Waukesha L7042GU natural gas compressor engine with a non-selective catalytic reduction (NSCR) unit and an air/fuel ratio (AFR) controller;
2. Source #2: (1) 400-hp Waukesha F18GL lean-burn natural gas engine;
3. Source #3: (1) 500-thousand British thermal units per hour (MBtu/hr) tri-ethylene glycol (TEG) natural gas dehydration unit;
4. Source #4: (1) 1,150-hp Waukesha 5790GL lean-burn natural gas engine;
5. Source #5: (2) 100-MBtu/hr space heaters;
6. Source #6: (1) 200-gallon condensate tank;
7. Source #7: (1) 500-gallon lube oil tank; and
8. Source #8: (1) 1,547-hp 4-stroke rich burn natural gas compressor engine with a NSCR unit and an AFR controller.

There are no fired treaters, boilers, line heaters, or flares at the Blaine County #3 Compressor Station.

B. Source Description

The Blaine County #3 Compressor Station utilizes four natural gas compressor engines to gather, compress, and transmit natural gas through a natural gas pipeline.

C. Permit History

On May 20, 1992, **Permit #2719-00** was issued to Northern Natural Gas Company (NNGC). The permit was issued for the Blaine County #3 Compressor Station which consisted of one 750-hp Waukesha L7042GU compressor engine with a three-way catalyst on the engine exhaust, one RAMA glycol dehydrator rated at 380,000 Btu/hr, one meter building, one compressor building, and a EFM/SCADA building.

Havre Pipeline Company, LLC (HPC) acquired the Blaine County #3 compressor station from NNGC on September 30, 1995.

On December 29, 1996, **Permit #2719-01** was issued to HPC. The permit acknowledged the change of ownership of the Blaine County #3 compressor station and added one 400-hp Waukesha F18GL lean-burn natural gas compressor engine and one 100-MBtu/hr space heater to the permit. Since the new engine would serve as the primary booster at the facility, the load on the existing 750-hp Waukesha L7042GU compressor engine was expected to fluctuate and run less efficiently. The Department of Environmental Quality (Department) and HPC expected that emission rates could exceed the current emission limits during worst case operating conditions; therefore, the emission limitations for this unit were slightly increased to allow HPC

to operate in compliance during this scenario. The increased emission limits were established consistently with the limits at other similar HPC facilities. Permit #2719-01 replaced Permit #2719-00.

On May 7, 1999, the Department received notification that UMC Petroleum Corp was merged with Ocean Energy, Inc. The HPC Blaine County #3 compressor station now operates as a subsidiary of Ocean Energy, Inc. The Department updated the permit to reflect the name change. On June 27, 1999, **Permit #2719-02** replaced Permit #2719-01.

On September 22, 1999, the Department received a request from HPC to alter Permit #2719-02 for the addition of a 1,150-hp Waukesha natural gas compressor engine. The Department made the suggested changes to the permit. On November 17, 1999, **Permit #2719-03** replaced Permit #2719-02.

On August 15, 2001, HPC submitted a request for a de minimis change at the Blaine County #3 compressor station. HPC proposed to replace a 370,000 Btu/hr TEG dehydrator with a 500,000 Btu/hr TEG dehydrator. This permit action incorporated the replacement according to the provisions of the Administrative Rules of Montana (ARM) 17.8.705(1)(r). In addition, the permit format was updated. **Permit #2719-04** replaced Permit #2719-03.

On August 23, 2004, the Department received a request to change the corporate name on Permit #2719-04 from HPC to Devon-Louisiana Corporation. The Department changed the corporate name on Permit #2719-04 from HPC to Devon-Louisiana Corporation, and updated the permit to reflect current permit language and rule references used by the Department. **Permit #2719-05** replaced Permit #2719-04.

On March 13, 2006, the Department received a request to change the corporate name on Permit #2719-05 from Devon-Louisiana Corporation to Devon. The Department changed the corporate name on Permit #2719-06 as requested. **Permit #2719-06** replaced Permit #2719-05.

#### D. Current Permit Action

On September 26, 2007, the Department received a complete Montana Air Quality Permit (MAQP) application from Devon requesting that the Department modify MAQP #2719-06. Devon is proposing to install a rich-burn natural gas compressor engine with a maximum rated design capacity equal to or less than 1,547-hp with a NSCR unit and an AFR controller. **Permit #2719-07** replaces Permit #2719-06.

#### E. Additional Information

Additional information, such as applicable rules and regulations, Best Available Control Technology (BACT)/Reasonably Available Control Technology (RACT) determinations, air quality impacts, and environmental assessments, is included in the analysis associated with each change to the permit.

## II. Applicable Rules and Regulations

The following are partial explanations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the ARM and are available, upon request, from the Department. Upon request, the Department will provide references for location of complete copies of all applicable rules and regulations or copies where appropriate.

#### A. ARM 17.8, Subchapter 1 – General Provisions, including but not limited to:

1. ARM 17.8.101 Definitions. This rule includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.

2. ARM 17.8.105 Testing Requirements. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.
3. ARM 17.8.106 Source Testing Protocol. The requirements of this rule apply to any emission source testing conducted by the Department, any source or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq.*, Montana Code Annotated (MCA).

Devon shall comply with the requirements contained in the Montana Source Test Protocol and Procedures Manual, including, but not limited to, using the proper test methods and supplying the required reports. A copy of the Montana Source Test Protocol and Procedures Manual is available from the Department upon request.

4. ARM 17.8.110 Malfunctions. (2) The Department must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation or to continue for a period greater than 4 hours.
5. ARM 17.8.111 Circumvention. (1) No person shall cause or permit the installation or use of any device or any means that, without resulting in reduction of the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner as to create a public nuisance.

B. ARM 17.8, Subchapter 2 – Ambient Air Quality, including, but not limited to the following:

1. ARM 17.8.204 Ambient Air Monitoring
2. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
3. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
4. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
5. ARM 17.8.213 Ambient Air Quality Standard for Ozone
6. ARM 17.8.214 Ambient Air Quality Standard for Hydrogen Sulfide
7. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
8. ARM 17.8.221 Ambient Air Quality Standard for Visibility
9. ARM 17.8.222 Ambient Air Quality Standard for Lead
10. ARM 17.8.223 Ambient Air Quality Standard for PM<sub>10</sub>

Devon must maintain compliance with the applicable ambient air quality standards.

C. ARM 17.8, Subchapter 3 – Emission Standards, including, but not limited to:

1. ARM 17.8.304 Visible Air Contaminants. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.
2. ARM 17.8.308 Particulate Matter, Airborne. (1) This rule requires an opacity limitation of less than 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate matter. (2) Under this rule, Devon shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.

3. ARM 17.8.309 Particulate Matter, Fuel Burning Equipment. This rule requires that no person shall cause, allow, or permit to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this rule.
4. ARM 17.8.310 Particulate Matter, Industrial Process. This rule requires that no person shall cause, allow, or permit to be discharged into the atmosphere particulate matter in excess of the amount set forth in this rule.
5. ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel. (4) Commencing July 1, 1972, no person shall burn liquid or solid fuels containing sulfur in excess of 1 pound of sulfur per million Btu fired. (5) Commencing July 1, 1971, no person shall burn any gaseous fuel containing sulfur compounds in excess of 50 grains per 100 cubic feet of gaseous fuel, calculated as hydrogen sulfide at standard conditions. Devon will burn pipeline quality natural gas in the compressor engine, which will meet this limitation.
6. ARM 17.8.324 Hydrocarbon Emissions--Petroleum Products. (3) No person shall load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank is equipped with a vapor loss control device as described in (1) of this rule.
7. ARM 17.8.340 Standard of Performance for New Stationary Sources and Emission Guidelines for Existing Sources. This rule incorporates, by reference, 40 Code of Federal Regulations (CFR) 60, Standards of Performance for New Stationary Sources (NSPS). This facility is not an NSPS affected source because it does not meet the definition of any NSPS subpart defined in 40 CFR 60. Devon is not an NSPS affected source because it does not meet the definition of a natural gas processing plant defined in 40 CFR 60, Subpart KKK.
8. ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source Categories. A major Hazardous Air Pollutant (HAP) source, as defined and applied in 40 CFR 63, shall comply with the requirements of 40 CFR 63, as applicable, including the following subparts:
  - Subpart HH – National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities.
  - Subpart HHH – National Emission Standards for Hazardous Air Pollutants From Natural Gas Transmission and Storage Facilities
  - Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines.

Based on the information submitted by Devon, the Blaine County #3 facility is not subject to the provisions of 40 CFR 63 Subparts HHH and ZZZZ, because the facility is not a major source of HAPs. The Blaine County #3 facility is, however, considered an area source of HAPs, and therefore, subject to 40 CFR 63, Subpart HH. For area sources, the affected source includes each glycol dehydration unit. Because the glycol dehydration unit emits less than 1 tons per year (TPY) of benzene, however, it is exempt from the control requirements listed in 40 CFR 63, Subpart HH. Records of the determinations applicable to this exemption must be maintained as required in 40 CFR 63.774(d)(1).



D. ARM 17.8, Subchapter 4 – Stack Height and Dispersion Techniques, including, but not limited to:

1. ARM 17.8.401 Definitions. This rule includes a list of definitions used in this chapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.402 Requirements. Devon must demonstrate compliance with the ambient air quality standards with a stack height that does not exceed Good Engineering Practices (GEP). The proposed height of the new or altered stack for Devon is below the allowable 65-meter GEP stack height.

E. ARM 17.8, Subchapter 5 – Air Quality Permit Application, Operation, and Open Burning Fees, including, but not limited to:

1. ARM 17.8.504 Air Quality Permit Application Fees. This rule requires that an applicant submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. Devon submitted the appropriate permit application fee for the current permit action.
2. ARM 17.8.505 Air Quality Operation Fees. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit (excluding an open burning permit) issued by the Department. The air quality operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

An air quality operation fee is separate and distinct from an air quality permit application fee. The annual assessment and collection of the air quality operation fee, described above, shall take place on a calendar-year basis. The Department may insert into any final permit issued after the effective date of these rules, such conditions as may be necessary to require the payment of an air quality operation fee on a calendar-year basis, including provisions that prorate the required fee amount.

F. ARM 17.8, Subchapter 7 – Permit, Construction, and Operation of Air Contaminant Sources, including, but not limited to:

1. ARM 17.8.740 Definitions. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a person to obtain an air quality permit or permit alteration to construct, alter or use any air contaminant sources that have the Potential to Emit (PTE) greater than 25 TPY of any pollutant. Devon has a PTE greater than 25 TPY of carbon monoxide (CO), Oxides of Nitrogen (NO<sub>x</sub>), and Volatile Organic Compounds (VOC); therefore, an air quality permit is required.
3. ARM 17.8.744 Montana Air Quality Permits--General Exclusions. This rule identifies the activities that are not subject to the Montana Air Quality Permit program.
4. ARM 17.8.745 Montana Air Quality Permits--Exclusion for De Minimis Changes. This rule identifies the de minimis changes at permitted facilities that do not require a permit under the Montana Air Quality Permit Program.
5. ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements. (1) This rule requires that a permit application be submitted prior to installation, alteration, or use of a source. Devon submitted the required permit application for the current permit

action. (7) This rule requires that the applicant notify the public by means of legal publication in a newspaper of general circulation in the area affected by the application for a permit. Devon submitted an affidavit of publication of public notice for the September 24, 2007, issue of *The Havre Daily News*, a newspaper of general circulation in the City of Havre, in Hill County, as proof of compliance with the public notice requirements.

6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.
7. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The required BACT analysis is included in Section III of this permit analysis.
8. ARM 17.8.755 Inspection of Permit. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.
9. ARM 17.8.756 Compliance with Other Requirements. This rule states that nothing in the permit shall be construed as relieving Devon of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.*
10. ARM 17.8.759 Review of Permit Applications. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.
11. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or altered source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.
12. ARM 17.8.763 Revocation of Permit. An air quality permit may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).
13. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.

14. ARM 17.8.765 Transfer of Permit. This rule states that an air quality permit may be transferred from one person to another if written notice of intent to transfer, including the names of the transferor and the transferee, is sent to the Department.
- G. ARM 17.8, Subchapter 8 – Prevention of Significant Deterioration of Air Quality, including, but not limited to:
1. ARM 17.8.801 Definitions. This rule is a list of applicable definitions used in this subchapter.
  2. ARM 17.8.818 Review of Major Stationary Sources and Major Modifications--Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification, with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow.

This facility is not a major stationary source since this facility is not a listed source and the facility's PTE is below 250 tons per year of any pollutant (excluding fugitive emissions).

- H. ARM 17.8, Subchapter 12 – Operating Permit Program Applicability, including, but not limited to:
1. ARM 17.8.1201 Definitions. (23) Major Source under Section 7412 of the FCAA is defined as any source having:
    - a. PTE > 100 tons/year of any pollutant;
    - b. PTE > 10 tons/year of any one HAP, PTE > 25 tons/year of a combination of all HAPs, or lesser quantity as the Department may establish by rule; or
    - c. PTE > 70 tons/year of particulate matter with an aerodynamic diameter of 10 microns or less (PM<sub>10</sub>) in a serious PM<sub>10</sub> nonattainment area.
  2. ARM 17.8.1204 Air Quality Operating Permit Program. (1) Title V of the FCAA amendments of 1990 requires that all sources, as defined in ARM 17.8.1204(1), obtain a Title V Operating Permit. In reviewing and issuing Air Quality Permit #2719-07 for Devon, the following conclusions were made:
    - a. The facility's PTE is less than 100 tons/year for any pollutant.
    - b. The facility's PTE is less than 10 tons/year for any one HAP and less than 25 tons/year for all HAPs.
    - c. This source is not located in a serious PM<sub>10</sub> nonattainment area.
    - d. This facility is not subject to any current NSPS.
    - e. This facility is not subject to any current NESHAP standards.
    - f. This source is not a Title IV affected source, nor a solid waste combustion unit.
    - g. This source is not an EPA designated Title V source.

Based on these facts, the Department determined that Devon is a minor source of emissions as defined under Title V. Therefore, Devon is not required to obtain a Title V Operating Permit.

### III. BACT Determination

A BACT determination is required for each new or altered source. Devon shall install on the new or altered source the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized.

A BACT analysis was submitted by Devon in Permit Application #2719-07, addressing some available methods of controlling emissions from a natural gas compressor engine. The Department reviewed these methods, as well as previous BACT determinations. The following control options have been reviewed by the Department in order to make the following BACT determinations:

#### A. NO<sub>x</sub> BACT

As part of the NO<sub>x</sub> BACT analysis, the following control technologies were reviewed:

- Lean-burn engine with a selective catalytic reduction (SCR) unit and an air-to-fuel ratio (AFR) controller
- Lean burn engine with a non-selective catalytic reduction (NSCR) unit and AFR controller
- Lean-burn engine with no additional controls
- Rich-burn engine with an SCR unit and an AFR controller
- Rich-burn engine with an NSCR and an AFR controller
- Rich burn engine with no additional controls

AFR controllers are assumed to be required as part of all add-on pollution control options. Therefore, engines with only AFR controllers were not analyzed as control options. SCR applied to rich-burn engines is technically infeasible because the oxygen concentration from rich-burn engines is not high enough for an SCR unit to operate properly. NSCR on lean-burn engines is technically infeasible because the engine must burn a rich fuel mixture for the NSCR to properly operate. Adverse environmental impacts could occur with an SCR unit operating on a lean-burn engine at variable loads as required by a typical compressor engine. SCR units are typically installed on process units that have a constant or low variability in load fluctuation. When engine load changes, excess ammonia (ammonia slip) may pass through the system and out the stack or not enough ammonia will be injected. SCR units are technically infeasible because of the potential adverse environmental impacts from the typical load fluctuations that are required for compressor engines. SCR units have not been installed on lean-burn compressor engines in Montana.

The following table lists the technically feasible control options in order of the highest control efficiency to the lowest control efficiency:

Control Technology	NO <sub>x</sub> Reduction (% Control)	NO <sub>x</sub> Emission Rate (g/bhp-hr)
Rich-burn engine with NSCR and AFR controller	80 – 90	1.0
Lean-burn engine without controls	0	1.5
Rich-burn engine without controls	0	8.5

A rich-burn engine with NSCR and AFR has the highest level of control for NO<sub>x</sub> emissions. The use of a rich-burn engine with an NSCR and AFR controller has been determined to be economically feasible, with little potential for adverse environmental and energy impacts. Typically, the Department considers a lb/hr emission limit based on 1.0 g/bhp-hr to be BACT for NO<sub>x</sub> emissions from natural gas compressor engines. Therefore, the Department has determined that the use of a rich-burn engine with an NSCR and AFR controller to meet an emission limit of 3.41 lb/hr, which corresponds to an emission factor of 1.0 g/bhp-hr, constitutes BACT for the control of NO<sub>x</sub> emissions from the proposed compressor engine.

## B. CO BACT

As part of the CO BACT analysis, the following control technologies were reviewed:

- Lean-burn engine with a catalytic oxidation unit and an AFR controller
- Lean-burn engine with an NSCR unit and AFR controller
- Lean-burn engine with no additional controls
- Rich-burn engine with an NSCR unit and an AFR controller
- Rich-burn engine with a catalytic oxidation unit and an AFR controller
- Rich-burn engine with no additional controls

AFR controllers are assumed to be required as part of all add-on pollution control options. Therefore, engines with only AFR controllers were not analyzed as control options. Catalytic oxidation applied to a rich-burn engine is technically infeasible because the oxygen concentration from a rich-burn engine is not high enough for a catalytic oxidizer to operate properly. An NSCR unit applied to a lean-burn engine is also technically infeasible because the NSCR unit needs a rich fuel-to-air ratio to operate effectively.

The following table lists the technically feasible control options in order of the highest control efficiency to the lowest control efficiency:

<b>Control Technology</b>	<b>CO Reduction (% Control)</b>	<b>CO Emission Rate (g/bhp-hr)</b>
Lean-burn engine with CO Catalyst and AFR controller	70-98	0.5
Rich-burn engine with NSCR and AFR controller	80-97	1.0
Lean-burn engine without controls	0	2.65
Rich-burn engine without controls	0	32.0

The control methods listed above are widely used and cannot be eliminated based solely on environmental or energy impacts. Lean-burn engines do emit relatively higher HAP (formaldehyde) emissions than rich-burn engines. However, lean-burn engines cannot be eliminated based on higher formaldehyde emissions, but the higher formaldehyde emissions can affect the BACT determination.

The following table shows the cost per ton of CO reduction (cost effectiveness) achieved for the various control options:

<b>Control Option</b>	<b>Total Annual Cost</b>	<b>CO Emissions (TPY)</b>	<b>Cost Effectiveness (\$/ton)</b>
Lean-burn engine with CO Catalyst and AFR controller	\$388,971	7.5	\$827
Rich-burn engine with NSCR and AFR controller	\$343,759	14.9	\$742
Lean-burn engine without controls	\$382,281	39.6	\$872
Rich-burn engine without controls	\$341,732	478.0	----

The use of a lean-burn engine with CO catalyst and AFR controller is economically feasible at \$827 per ton of CO removed. However, the following table shows the incremental cost per ton of CO removed when comparing a rich-burn engine with NSCR and AFR controller to a lean-burn engine with CO Catalyst and AFR controller:

<b>Control Option</b>	<b>Total Annual Cost</b>	<b>CO Emission Rate (TPY)</b>	<b>Incremental Cost-Effectiveness (\$/ton)</b>
Lean-burn engine with CO Catalyst and AFR controller	\$388,971	7.5	\$6,110
Rich-burn engine with NSCR and AFR controller	\$343,759	14.9	----

A lean-burn engine with CO catalyst and AFR controller would cost approximately \$6,110 per additional ton of CO removed, which is considered excessive and above industry norms. Therefore, the Department has determined that the use of a rich-burn engine with an NSCR and AFR controller to meet an emission limit of 3.41 lb/hr, which corresponds to an emission factor of 1.0 g/bhp-hr, constitutes BACT for the control of CO emissions from the proposed compressor engine.

#### C. VOC BACT

Because Devon proposed no additional controls to meet lb/hr emissions limits equivalent to 1.0 g/bhp-hr for the proposed engine and because no additional controls to meet lb/hr emission limits equivalent to 1.0 g/bhp-hr have been determined to be BACT for other recently permitted similar sources, the Department determined that no additional controls to meet a lb/hr emission limit equivalent to 1.0 g/bhp-hr constitutes BACT for the proposed compressor engine.

#### D. PM<sub>10</sub> and SO<sub>2</sub> BACT

The Department is not aware of any BACT determinations that have required controls for PM<sub>10</sub> and SO<sub>2</sub> emissions from natural gas fired compressor engines. Devon proposed using no additional add-on controls and burning pipeline-quality natural gas as BACT for PM<sub>10</sub> and SO<sub>2</sub> emissions from the proposed compressor engine. Due to the relatively small amount of PM<sub>10</sub> and SO<sub>2</sub> emissions from the proposed compressor engine and the cost of adding additional control, any add-on controls would be cost prohibitive. Therefore, the Department concurred with Devon's BACT proposal and determined that no additional controls and burning pipeline-quality natural gas constitutes BACT for PM<sub>10</sub> and SO<sub>2</sub> emissions from the proposed compressor engine.

The control options selected have controls and control costs comparable to other recently permitted similar sources and are capable of achieving the appropriate emission standards.

#### IV. Emission Inventory (Allowable)

Emitting Units	TPY				
	NO <sub>x</sub>	PM <sub>10</sub>	SO <sub>2</sub>	VOC	CO
<b>Existing</b>					
#01 750 hp Waukesha L7042GU Compressor Engine	14.50	0.26	0.02	7.23	21.72
#02 400 hp Waukesha F18GL Compressor Engine	7.71	0.16	0.01	3.85	12.05
#03 TEG Dehydration Unit	0.22	0.02	0.00	1.68	0.18
#04 1,150 hp Waukesha 5790GL Compressor Engine	16.64	0.39	0.03	11.13	29.43
--- Natural Gas Fired Space Heaters	0.09	0.00	0.00	0.02	0.01
--- Miscellaneous VOC Sources	0.00	0.00	0.00	5.21	0.00
<b>New</b>					
#08 1,547 hp 4-stroke, Rich-Burn Compressor Engine	14.94	0.51	0.03	14.94	14.94
<b>Total:</b>	<b>54.10</b>	<b>1.34</b>	<b>0.09</b>	<b>44.05</b>	<b>78.33</b>

\* A complete emission inventory is on file with the Department.

#### V. Existing Air Quality

The Blaine County #3 Compressor Station is located in the NE¼ of the SE¼ of Section 7, Township 27 North, Range 19 East, Blaine County, Montana. Blaine County is classified as “Unclassifiable/Attainment” for the National Ambient Air Quality Standards (NAAQS) for all criteria pollutants. The closest PSD Class I area is the UL Bend Wilderness Area, which is located approximately 50 miles southeast of the facility.

#### VI. Ambient Air Impact Analysis

The Department has determined, based on ambient air modeling, that the impacts from this permitting action will be minor. The Department believes it will not cause or contribute to a violation of any ambient air quality standard.

Bison Engineering, Inc. conducted air quality modeling for the proposed addition of a compressor engine at Devon’s Blaine County #3 Compressor Station as part of the Devon air quality permit application. Proposed NO<sub>x</sub> emissions were modeled to demonstrate compliance with the Montana Ambient Air Quality Standards (MAAQS) and the NAAQS. EPA’s SCREEN3 model was used with worst-case meteorological conditions.

Receptors within SCREEN3 were located at 1 meters and 100 meters from the source, and at 100 meter spacing out to a distance of 50,000 meters. This placement causes SCREEN3 to identify the point of highest impact at or beyond 1 meter from the source. The receptors were modeled using the ‘simple terrain’ algorithm, causing the receptor elevations to be placed at the elevation of the source. This is appropriate for the site topography, which is relatively flat in all directions from the site.

The nearest permitted emissions source to this facility is the CS-103 Compressor station, located 1.35 kilometers east of the Blaine County #3 Compressor Station site. The Department ran a SCREEN3 model of the CS103 station and the combined impact of the two stations has been conservatively estimated by adding the peak impacts of the two facilities.

NO<sub>x</sub> was evaluated since this pollutant is the primary pollutant of concern for compressor stations located in counties with the potential for coal bed methane development. Table 1 identifies the design concentrations and modeling parameters used in the model. Building downwash was not considered for either source.

**Table 1. NO<sub>x</sub> Emission Rates and Modeling Parameters**

Source ID	NO <sub>x</sub> (g/s)	UTM Coordinates			Stack Parameters			
		Easting (m)	Northing (m)	Elevation (m)	Height (m)	Temperature (°K)	Velocity (m/s)	Diameter (m)
BC3	1.2335	625222	5329446	1066.8	3.048	803	38.10	0.30
CS-103	0.559	626562	5329248	1188.7	6.10	700	15.24	0.30

Results from the cumulative impact modeling are included in Table 2. All of the modeled impacts are well below the NO<sub>x</sub> NAAQS and MAAQS. The modeled cumulative annual NO<sub>x</sub> impact is less than the 25 µg/m<sup>3</sup> annual NO<sub>x</sub> Class II PSD increment. The modeling demonstrates that the proposed compressor engine changes at the Blaine County #3 compressor station will not cause or contribute to a violation of the ambient air quality standards.

**Table 2: NAAQS/MAAQS Compliance Demonstration**

Pollu- tant	Avg. Period	Modeled Conc. <sup>a</sup> (µg/m <sup>3</sup> )	Background Conc. (µg/m <sup>3</sup> )	Ambient Conc. (µg/m <sup>3</sup> )	NAAQS (µg/m <sup>3</sup> )	% of NAAQS	MAAQS (µg/m <sup>3</sup> )	% of MAAQS
NO <sub>2</sub>	1-hr	173.8 + 91.18 <sup>b</sup>	75	340.0	-----	-----	564	60
	Annual	13.9 + 7.29 <sup>b</sup>	6	27.19	100	27	94	29

<sup>a</sup> Concentrations are high-second high values except annual averages.

<sup>b</sup> This value is the NO<sub>x</sub> impact.

## VII. Taking or Damaging Implication Analysis

As required by 2-10-105, MCA, the Department conducted a private property taking and damaging assessment and determined there are no taking or damaging implications.

## VIII. Environmental Assessment

An environmental assessment, required by the Montana Environmental Policy Act, was completed for this project. A copy is attached.

Analysis Prepared By: Moriah Peck

Date: October 16, 2007



**DEPARTMENT OF ENVIRONMENTAL QUALITY**  
**Permitting and Compliance Division**  
**Air Resources Management Bureau**  
**P.O. Box 200901, Helena, Montana 59620**  
**(406) 444-3490**

**FINAL ENVIRONMENTAL ASSESSMENT (EA)**

*Issued To:* Devon Energy Production Company, L.P.  
Blaine County #3 Compressor Station  
PO Box 2606  
Havre, MT 59501

*Air Quality Permit Number:* 2719-07

*Preliminary Determination Issued:* October 29, 2007

*Department Decision Issued:* November 21, 2007

*Permit Final:*

1. *Legal Description of Site:* The legal description of the site location would be the NE ¼ of the SE ¼ of Section 7, Township 27 North, Range 19 East, Blaine County, Montana.
2. *Description of Project:* The project would consist of the addition of a natural gas compressor engine at an existing natural gas compressor station.
3. *Objectives of Project:* The proposed project would provide increased compression of natural gas for transmission through the pipeline.
4. *Alternatives Considered:* In addition to the proposed action, the Department also considered the “no-action” alternative. The “no-action” alternative would deny issuance of the air quality preconstruction permit to the proposed facility. However, the Department does not consider the “no-action” alternative to be appropriate because Devon demonstrated compliance with all applicable rules and regulations as required for permit issuance. Therefore, the “no-action” alternative was eliminated from further consideration.
5. *A Listing of Mitigation, Stipulations, and Other Controls:* A list of enforceable conditions, including a BACT analysis, would be included in Permit #2719-07.
6. *Regulatory Effects on Private Property:* The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined that the permit conditions are reasonably necessary to ensure compliance with applicable requirements and demonstrate compliance with those requirements and do not unduly restrict private property rights.

7. The following table summarizes the potential physical and biological effects of the proposed project on the human environment. The “no-action” alternative was discussed previously.

		Major	Moderate	Minor	None	Unknown	Comments Included
A	Terrestrial and Aquatic Life and Habitats			X			Yes
B	Water Quality, Quantity, and Distribution			X			Yes
C	Geology and Soil Quality, Stability and Moisture			X			Yes
D	Vegetation Cover, Quantity, and Quality			X			Yes
E	Aesthetics			X			Yes
F	Air Quality			X			Yes
G	Unique Endangered, Fragile, or Limited Environmental Resources			X			Yes
H	Demands on Environmental Resource of Water, Air and Energy			X			Yes
I	Historical and Archaeological Sites				X		Yes
J	Cumulative and Secondary Impacts			X			Yes

SUMMARY OF COMMENTS ON POTENTIAL PHYSICAL AND BIOLOGICAL EFFECTS: The following comments have been prepared by the Department.

A. Terrestrial and Aquatic Life and Habitats

Minor impacts to terrestrial and aquatic life and habitats would be expected from the proposed project. This facility has been at this site since the early 1990s. The addition of a compressor engine to this facility would result in an increase in air pollutants and corresponding deposition of pollutants would occur (as described in Section 7.F. of this EA). Deer, antelope, coyotes, geese, ducks, sage grouse, and other terrestrials could potentially use the area around the facility. However, due to the relatively small size of the project, the Department determined that any impacts from deposition would be minor.

B. Water Quality, Quantity and Distribution

Minor impacts would be expected on water quality, quantity, and distribution from the proposed project because the facility would be an increased source of air pollutants. The facility would have no direct discharge into surface water. However, minor amounts of water may be required to control fugitive dust emissions from the access roads and the general facility property. In addition, the facility would emit air pollutants and corresponding deposition of pollutants would occur. However, the Department determined that because of the relatively small size of the facility that any impact resulting from the deposition of pollutants on water quality, quantity, and distribution would be minor.

C. Geology and Soil Quality, Stability and Moisture

Minor impacts would occur on the geology and soil quality, stability and moisture from the proposed project. Deposition of pollutants would occur (as described in Section 7.F. of this EA); however, the Department determined, based on the relatively small size of the project, that any impacts resulting from the deposition of pollutants on the soils surrounding the site would be minor.

D. Vegetation Cover, Quantity, and Quality

This permitting action would have a minor effect on vegetation cover, quantity, and quality. The proposed project would take place at an existing, industrial property that has already been disturbed. No additional vegetation on the site would be disturbed for the project. The increase in potential levels of NO<sub>x</sub>, CO, VOC, PM<sub>10</sub>, and SO<sub>x</sub> from existing emission levels might have a minor effect on the surrounding vegetation; however, the air quality permit associated with this project contains limitations to minimize the effect of the emissions on the surrounding environment. Overall, any impacts to vegetation cover, quantity, and quality would be minor.

E. Aesthetics

The proposed project would take place at an existing industrial site, an area that has previously been disturbed and already has noise associated with its operation. Therefore, only minor impacts to aesthetics would be anticipated.

F. Air Quality

There would be minor impacts to air quality from the proposed project because the compressor engine would emit the following air pollutants: PM<sub>10</sub>; NO<sub>x</sub>; CO; VOC, including HAPs; and SO<sub>2</sub>. Air emissions from the facility would be minimized by limitations and conditions that would be included in Permit #2719-07. Conditions would include, but would not be limited to, BACT emission limits and opacity limitations on the proposed engine and the general facility. In addition, the Department determined, based on ambient air quality modeling (see Section VI of the Permit Analysis) that the proposed project would comply with the MAAQS/NAAQS. The increased air emissions due to the addition of the compressor engine would be as follows:

	PM <sub>10</sub>	CO	NO <sub>x</sub>	VOC	SO <sub>2</sub>
<b>Potential Emissions Increases (TPY)</b>	0.51	14.94	14.94	14.94	0.03

Deposition of pollutants would occur as a result of operating the facility, but the Department determined that the impacts from deposition of pollutants would be minor due to dispersion characteristics of pollutants (stack height, stack temperature, etc.), the atmosphere (wind speed, wind direction, ambient temperature, etc.), conditions that would be placed in Permit #2719-07, and the results of the ambient air quality modeling. Therefore, any impacts to air quality from the proposed facility would be minor.

G. Unique Endangered, Fragile, or Limited Environmental Resources

In an effort to identify any unique endangered, fragile, or limited environmental resources in the area, the Department contacted the Montana Natural Heritage Program, Natural Resource Information System (NRIS). The NRIS search identified *Centrocercus urophasianus* (Greater Sage-Grouse) as a species of special concern located near the project area. In this case, the project area was defined by the section, township, and range of the location with an additional 1-mile buffer zone. Due to the relatively low levels of pollutants that would be emitted, and because controlled emissions from the source would not cause or contribute to a violation of any ambient air quality standard, the Department determined that it would be unlikely that the proposed project would impact any species of special concern and that any potential impacts would be minor.

#### H. Demands on Environmental Resource of Water, Air and Energy

The proposed project would have minor impacts on the demands for the environmental resources of air, because the facility would be a minor source of air pollutants. Demands for water would be minor because the facility may use water for dust suppression. Deposition of pollutants would occur as a result of operating the compressor engine (as described in Section 7.F. of this EA); however, the Department determined that any impacts from deposition of pollutants would be minor.

The proposed project would be expected to have minor impacts on the demand for the environmental resource of energy because additional power would be used at the site. The impact on the demand for the non-renewable environmental resource of energy would be minor because the facility would continue to be relatively small by industrial standards. Overall, the impacts for the demands on the environmental resources of water, air, and energy would be minor.

#### I. Historical and Archaeological Sites

The proposed project would take place within a previously disturbed industrial site. Because the site is currently used as a compressor station site and no additional disruption or disturbed acreage will result from the project, no impacts to historical or archaeological sites are anticipated.

#### J. Cumulative and Secondary Impacts

Overall, the cumulative and secondary impacts on the physical and biological aspects of the human environment in the immediate area would be minor due to the relatively small size of the project. The Department believes that this facility would be expected to operate in compliance with all applicable rules and regulations as would be outlined in Permit #2719-07.

Additional facilities (compressor stations, gas plants, etc.) could locate in the area to withdraw natural gas from the nearby area and/or to separate components of natural gas. However, any future facility would be required to apply for and receive the appropriate permits from the appropriate regulating authority. Environmental impacts from any future facilities would be assessed through the appropriate permitting process.

8. The following table summarizes the potential economic and social effects of the proposed project on the human environment. The “no-action” alternative was discussed previously.

		Major	Moderate	Minor	None	Unknown	Comments Included
A	Social Structures and Mores				X		Yes
B	Cultural Uniqueness and Diversity				X		Yes
C	Local and State Tax Base and Tax Revenue				X		Yes
D	Agricultural or Industrial Production			X			Yes
E	Human Health			X			Yes
F	Access to and Quality of Recreational and Wilderness Activities				X		Yes
G	Quantity and Distribution of Employment				X		Yes
H	Distribution of Population				X		Yes
I	Demands for Government Services			X			Yes
J	Industrial and Commercial Activity				X		Yes
K	Locally Adopted Environmental Plans and Goals				X		Yes
L	Cumulative and Secondary Impacts			X			Yes

SUMMARY OF COMMENTS ON POTENTIAL ECONOMIC AND SOCIAL EFFECTS: The following comments have been prepared by the Department.

A. Social Structures and Mores

The proposed project would not cause a disruption to any native or traditional lifestyles or communities (social structures or mores) in the area because the project would be installed at a previously disturbed industrial site. The proposed project would not change the nature of the site.

B. Cultural Uniqueness and Diversity

The proposed project would not cause a change in the cultural uniqueness and diversity of the area because the site is currently used as a compressor station; therefore, the land use would not be changing. The use of the surrounding area would not change as a result of this project.

C. Local and State Tax Base and Tax Revenue

The proposed project would not result in any impacts to the local and state tax base and tax revenue because the proposed project would not require new permanent employees to be hired.

D. Agricultural or Industrial Production

The proposed project would result in minor impacts to agricultural or industrial production. The proposed project would not displace any agricultural or industrial land as the project would occur at the existing site. While air emissions from the facility may increase and corresponding deposition of pollutants would occur (as described in Section 7.F. of this EA), the Department determined that any impacts from deposition would be minor.

E. Human Health

The proposed project would result in minor, if any, impacts to human health. Deposition of pollutants would occur (as described in Section 7.F. of this EA); however, the Department determined that the proposed project would comply with all applicable air quality rules, regulations, and standards. These rules, regulations, and standards are designed to be protective of human health. Overall, any impacts to public health would be minor.

F. Access to and Quality of Recreational and Wilderness Activities

The proposed project would not alter any existing access to or quality of any recreational or wilderness area activities. Therefore, no impacts to access and quality of recreational and wilderness activities would be expected.

G. Quantity and Distribution of Employment

The proposed project would not result in any impacts to the quantity or distribution of employment at the facility or surrounding community. No employees would be hired at the facility as a result of the project.

H. Distribution of Population

The proposed project would not involve any significant physical or operational change that would affect the location, distribution, density, or growth rate of the human population.

I. Demands for Government Services

There would be minor impacts on the demands for government services because additional time would be required by government agencies to issue the appropriate permits for the facility and to assure compliance with the applicable rules, standards, and conditions that would be contained in those permits.

J. Industrial and Commercial Activity

No impacts would be expected on the local industrial and commercial activity because the proposed project would take place at an existing facility. No additional industrial or commercial activities would be expected to take place in the area due to the project.

K. Locally Adopted Environmental Plans and Goals

The Department is not aware of any locally adopted environmental plans and goals that would be affected by issuing Permit #2719-07. Devon would be required to maintain compliance with the applicable ambient air quality standards. These standards would protect the existing site and the environment surrounding the site.

L. Cumulative and Secondary Impacts

Overall, cumulative and secondary impacts from this project would result in minor impacts to the economic and social aspects of the human environment due to the relatively small size of the project. The Department believes that this facility would be expected to operate in compliance with all applicable rules and regulations as would be outlined in Permit #2719-07.

Additional facilities (compressor stations, gas plants, etc.) could locate in the area to withdraw natural gas from the nearby area and/or to separate the components of natural gas. However, any future facility would be required to apply for and receive the appropriate permits from the appropriate regulating authority. Environmental impacts from any future facilities would be assessed through the appropriate permitting process.

Recommendation: No Environmental Impact Statement (EIS) is required.

If an EIS is not required, explain why the EA is an appropriate level of analysis: The current permitting action is for the addition of a natural gas compressor engine at Devon's existing Blaine County #3 Compressor Station. Permit #2719-07 includes conditions and limitations to ensure the facility will operate in compliance with all applicable rules and regulations. In addition, there are no significant impacts associated with this proposal.

Other groups or agencies contacted or which may have overlapping jurisdiction: Natural Resource Information System – Montana Natural Heritage Program

Individuals or groups contributing to this EA: Department of Environmental Quality – Air Resources Management Bureau, Natural Resource Information System – Montana Natural Heritage Program

EA prepared by: Moriah Peck

Date: October 16, 2007